



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

October 06, 2017

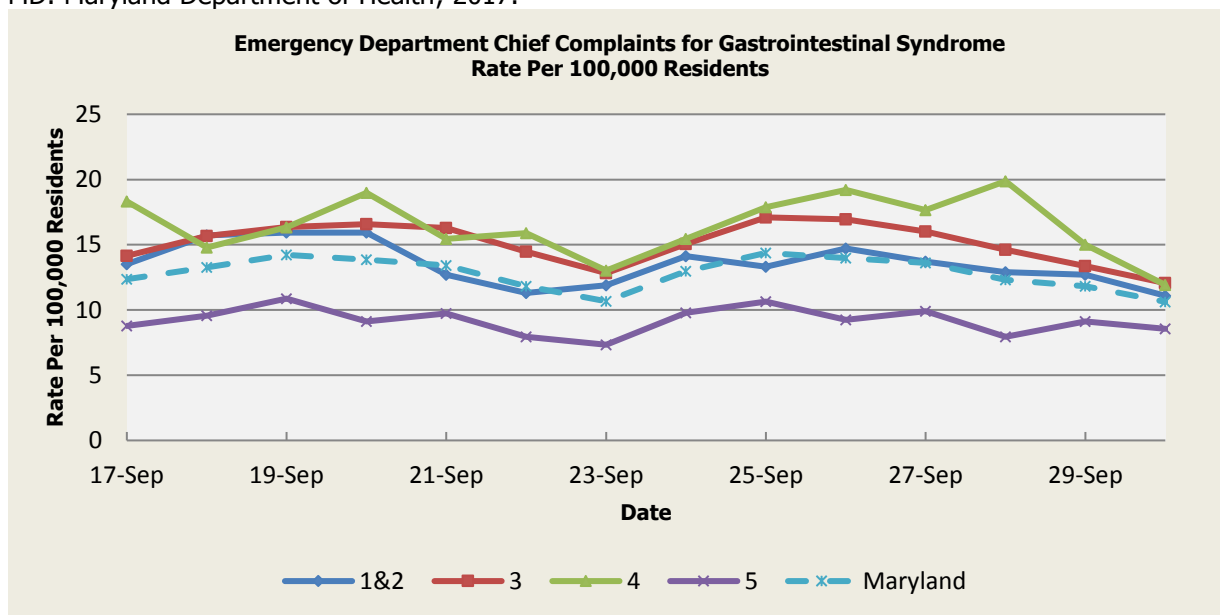
Public Health Preparedness and Situational Awareness Report: #2017:39 Reporting for the week ending 09/30/17 (MMWR Week #39)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

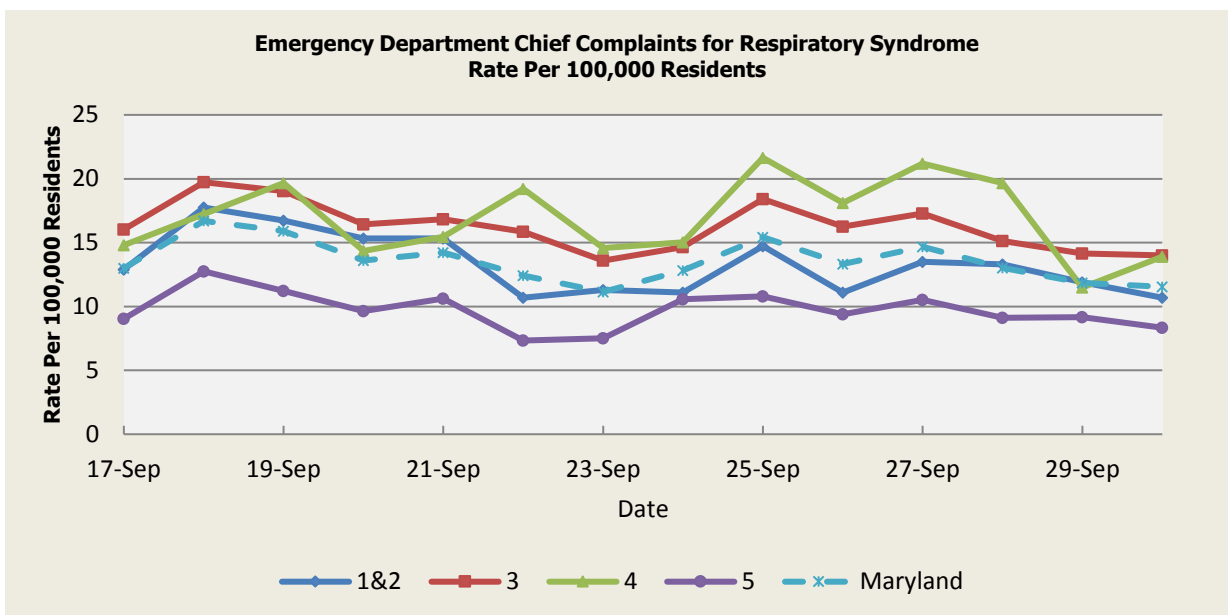
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were no Gastrointestinal Syndrome outbreaks reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.24	14.32	14.63	9.76	12.43
Median Rate*	12.91	14.80	15.02	10.22	12.95

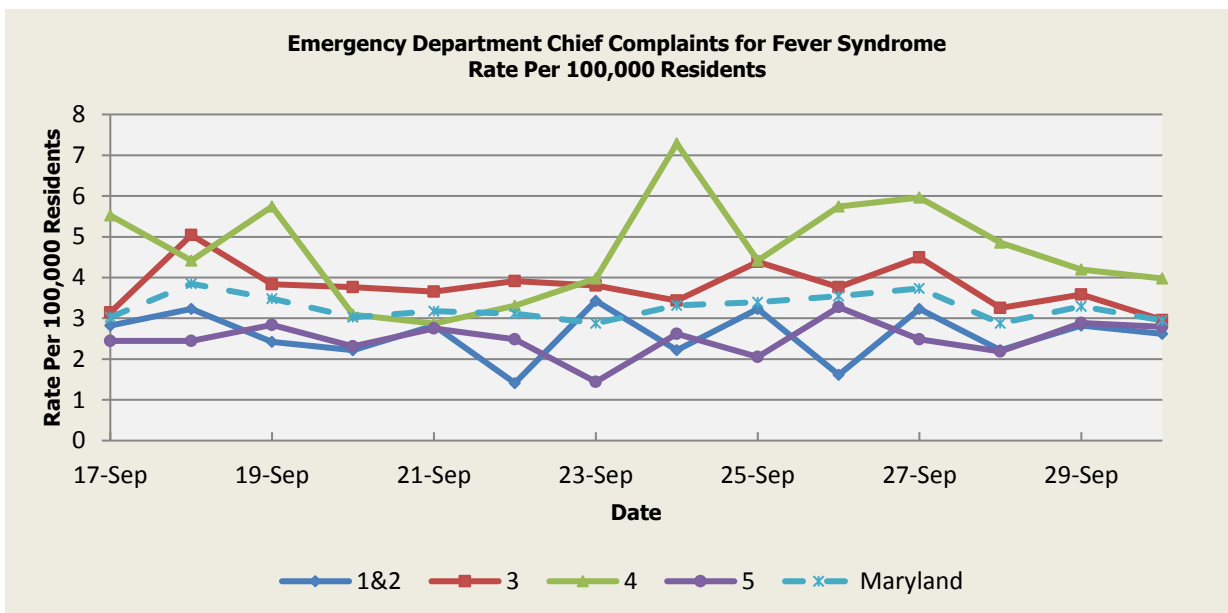
* Per 100,000 Residents



There was one (1) Respiratory Syndrome outbreak reported this week: one (1) outbreak of Variant Influenza associated with a Fair (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.42	13.70	13.60	9.44	11.87
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

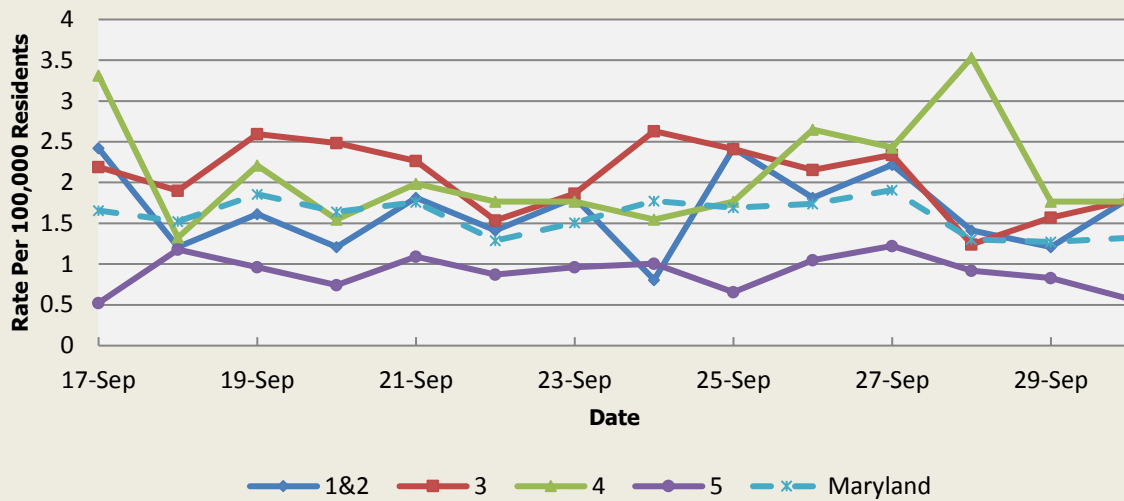


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.87	3.67	3.77	2.92	3.32
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



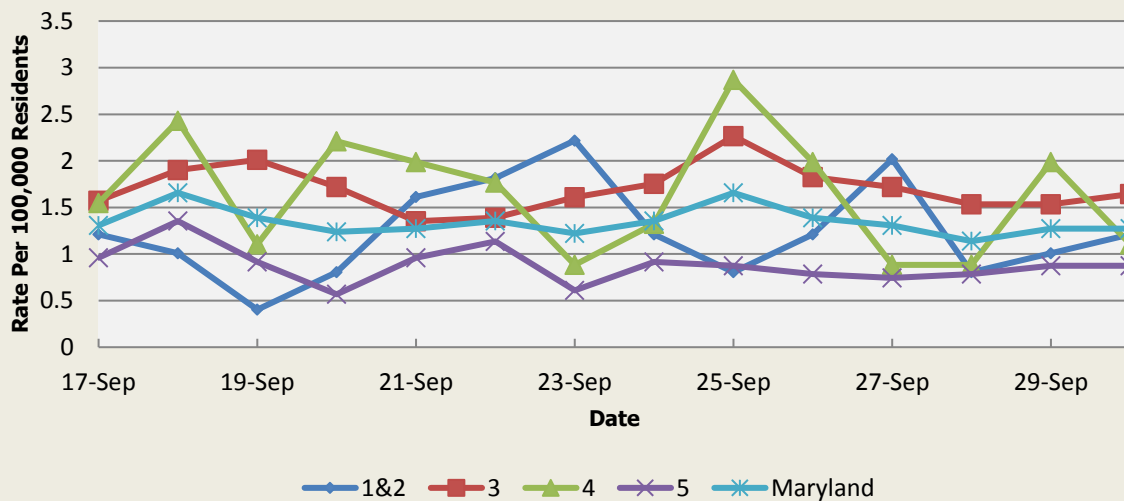
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.99	1.79	1.92	0.91	1.40
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

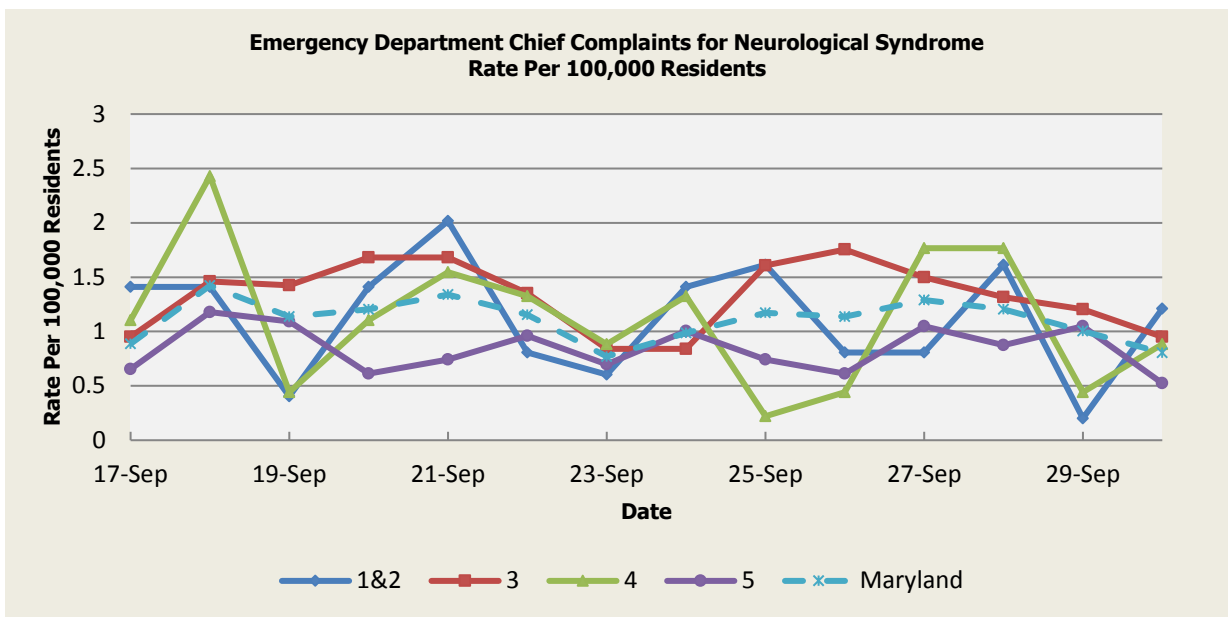


There were two (2) Rash Syndrome outbreaks reported this week: two (2) outbreaks of Scabies in an Assisted Living Facility (Region 4).

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.18	1.66	1.68	0.97	1.36
Median Rate*	1.21	1.68	1.77	1.00	1.39

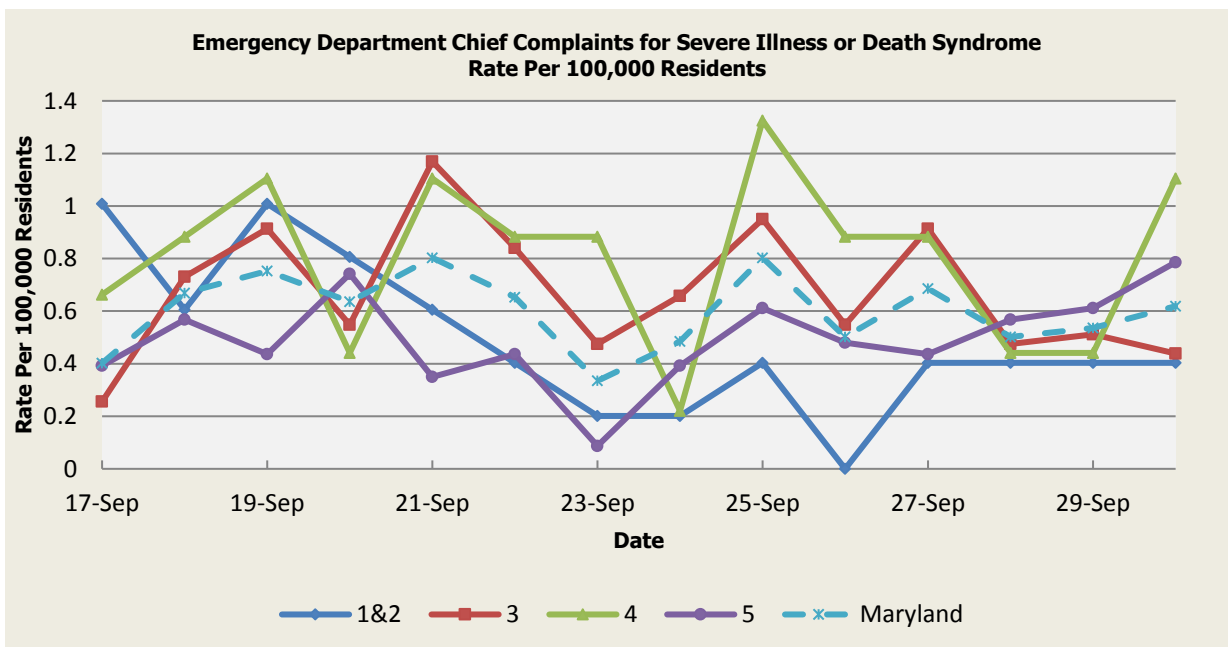
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.76	0.65	0.48	0.63
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

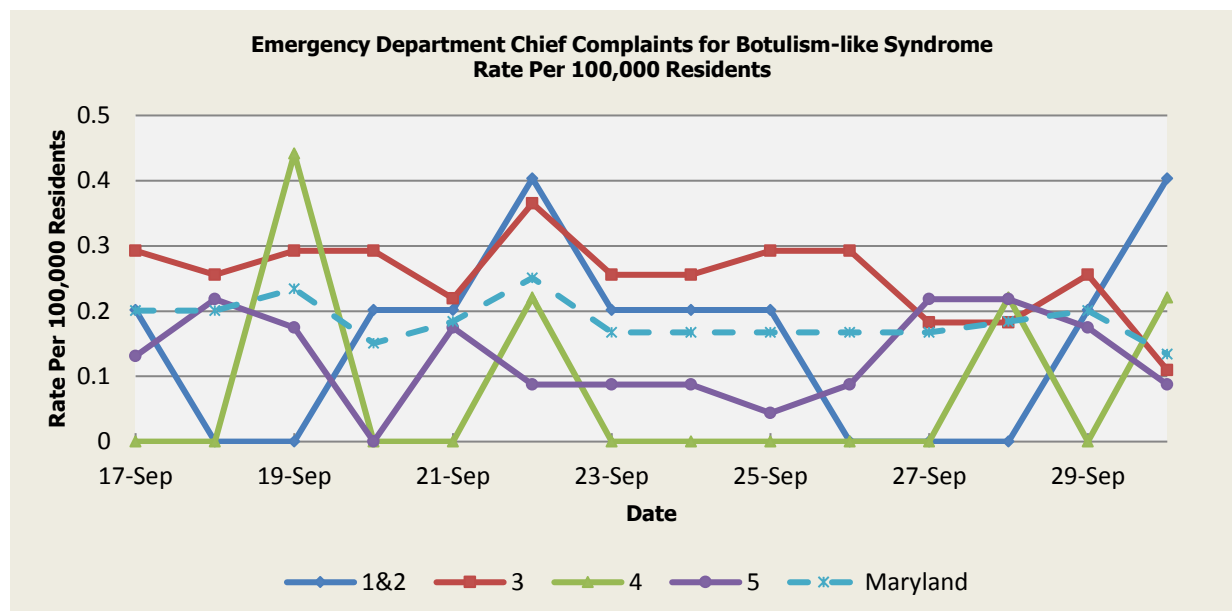


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.87	0.77	0.44	0.68
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

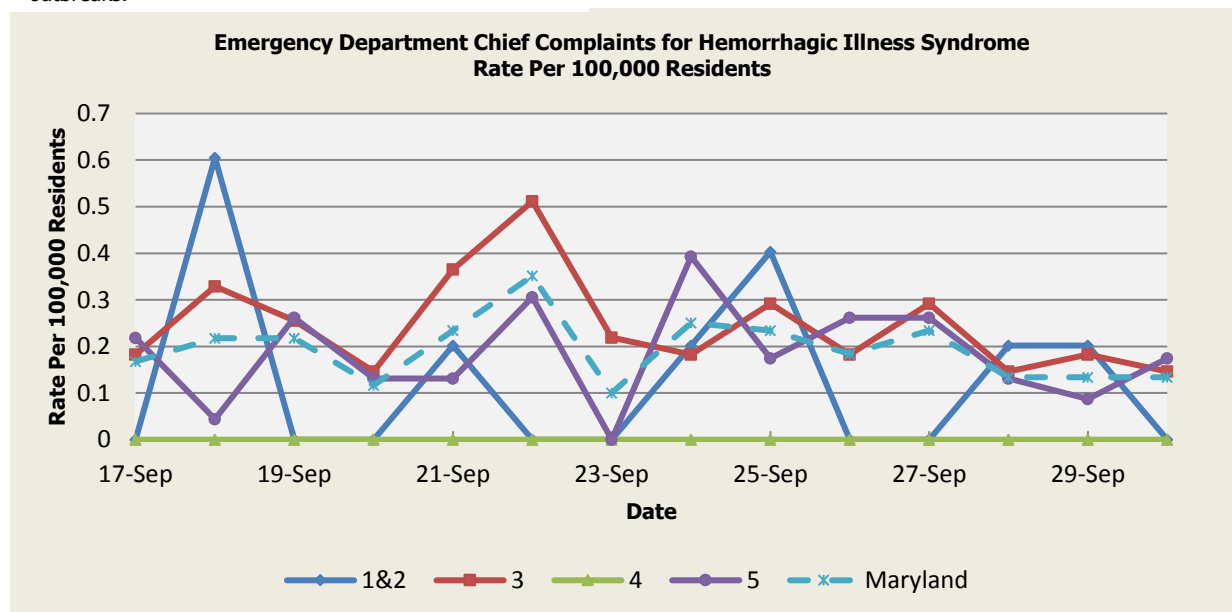
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 09/17 (Regions 1&2,3,5), 09/18 (Regions 3,5), 09/19 (Regions 3,4,19), 09/20 (Regions 1&2,3), 09/21 (Regions 1&2,3,5), 09/22 (Regions 1&2,3,4), 09/23 (Regions 1&2,3), 09/24 (Regions 1&2,3), 09/25 (Regions 1&2,3), 09/26 (Region 3), 09/27 (Regions 3,5), 09/28 (Regions 3,4,5), 09/29 (Regions 1&2,3,5), 09/30 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.05	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

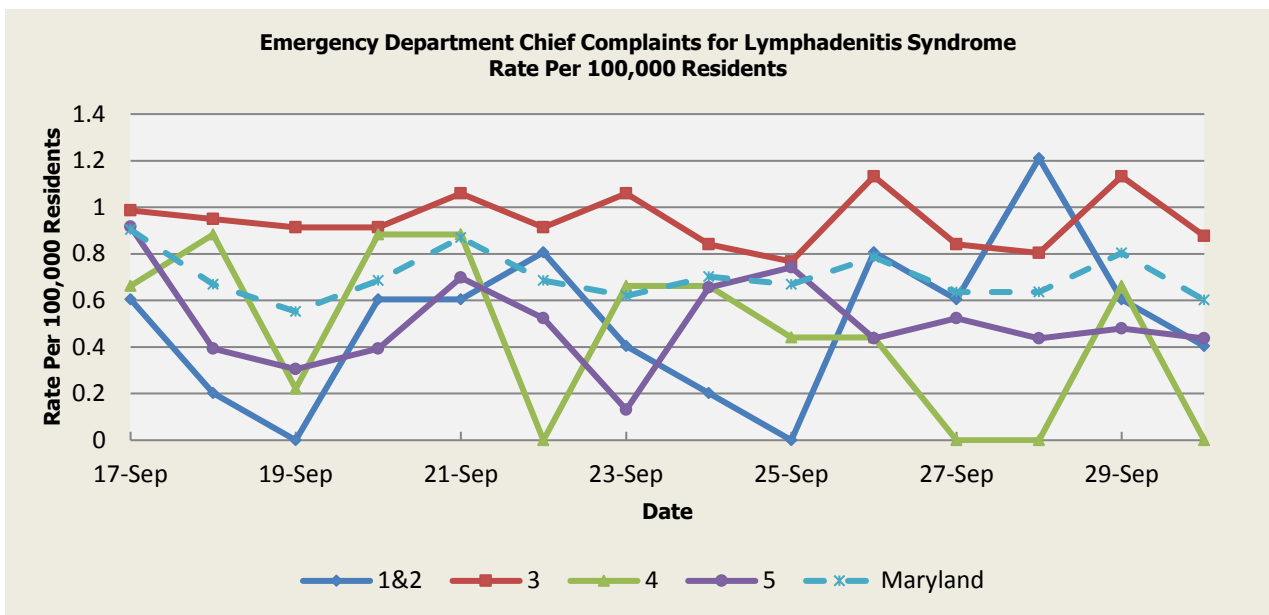
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 09/17 (Regions 3,5), 09/18 (Regions 1&2,3), 09/19 (Regions 3,5), 09/20 (Region 3), 09/21 (Regions 1&2,3), 09/22 (Regions 3,5), 09/23 (Region 3), 09/24 (Regions 1&2,3,5), 09/25 (Regions 1&2,3), 09/26 (Regions 3,5), 09/27 (Regions 3,5), 09/28 (Regions 1&2,3), 09/29 (Regions 1&2,3), 09/30 (Region 3). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 09/17 (Regions 1&2,4,5), 09/18 (Region 4), 09/20 (Regions 1&2,4), 09/21 (Regions 1&2,3,4,5), 09/22 (Regions 1&2), 09/23 (Regions 3,4), 09/24 (Regions 4,5), 09/25 (Region 5), 09/26 (Regions 1&2,3), 09/27 (Regions 1&2), 09/28 (Regions 1&2), 09/29 (Regions 1&2,3,4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.29	0.50	0.33	0.30	0.39
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

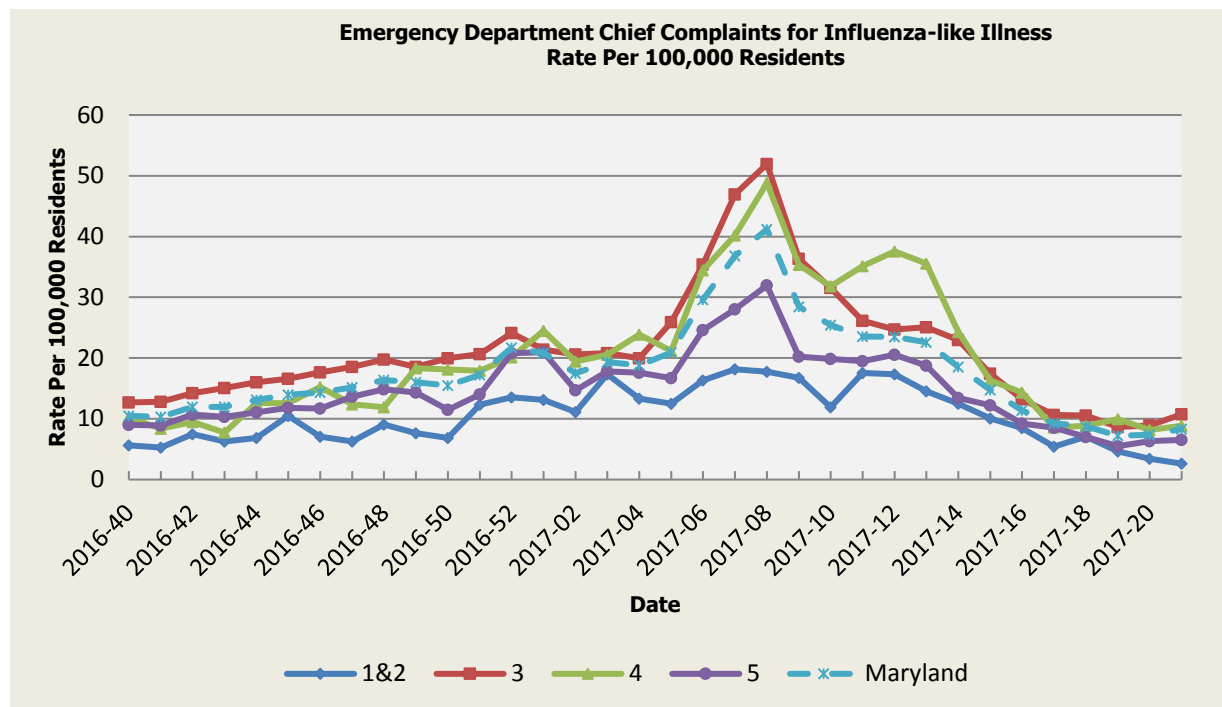
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	September			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	37	53.8	51	297	353.4	329
Meningococcal disease	1	0.4	0	5	4	4
Measles	0	0.2	0	4	4.4	4
Mumps	0	1.8	2	23	40.4	18
Rubella	0	0	0	1	4.4	3
Pertussis	13	41.6	34	172	261	276
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	53	107.6	109	670	760.4	763
Shigellosis	12	20.6	19	197	163.2	192
Campylobacteriosis	51	64.8	70	641	606.4	610
Shiga toxin-producing Escherichia coli (STEC)	13	14	12	141	119.4	111
Listeriosis	2	1.4	1	21	13.8	14
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	4	5	3	13.4	11
Lyme Disease	189	267.2	249	2829	2510.8	2395
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	1.2	0	0	6	0
Dengue Fever	1	2.6	1	19	23.8	16
Zika Virus***	0	2.4	0	2	13.4	7
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	28	19.4	18	190	142	145

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of October 10, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 58.

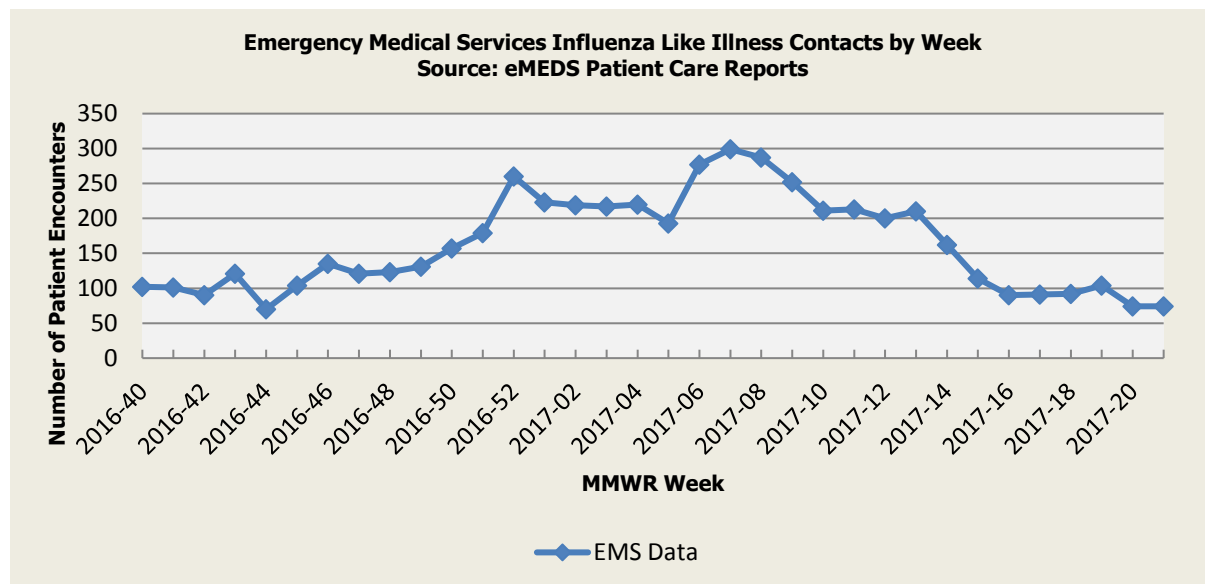
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



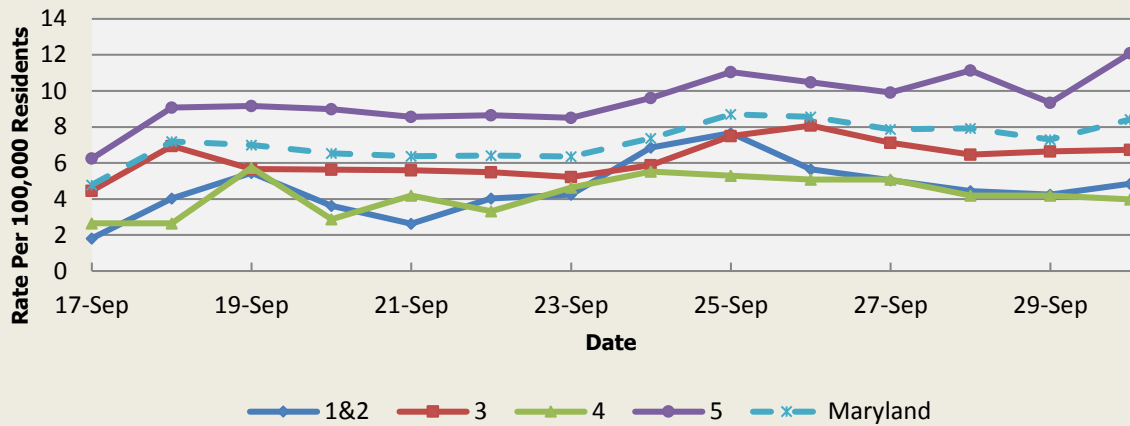
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

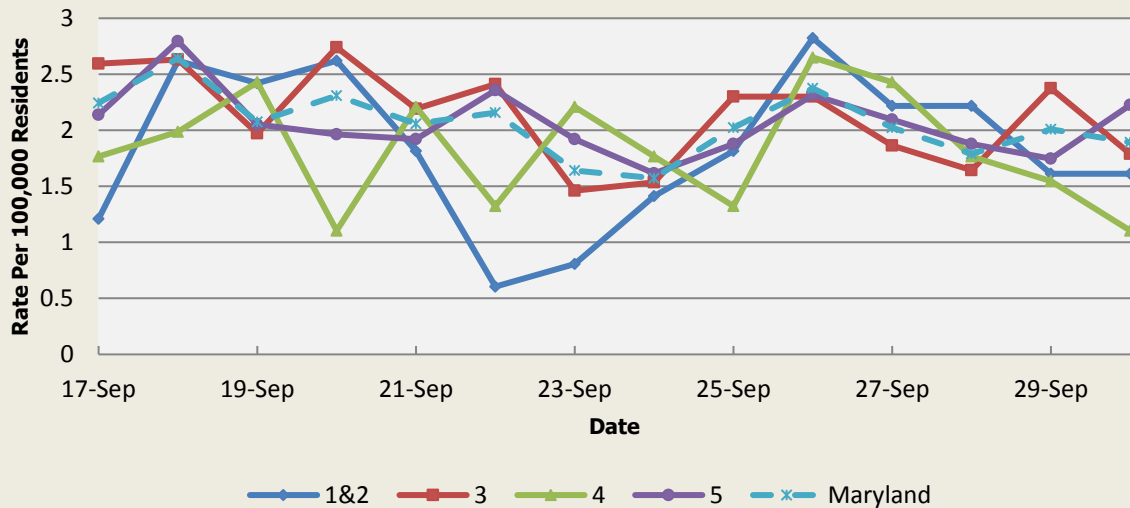


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.58	4.65	2.59	8.01	5.69
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



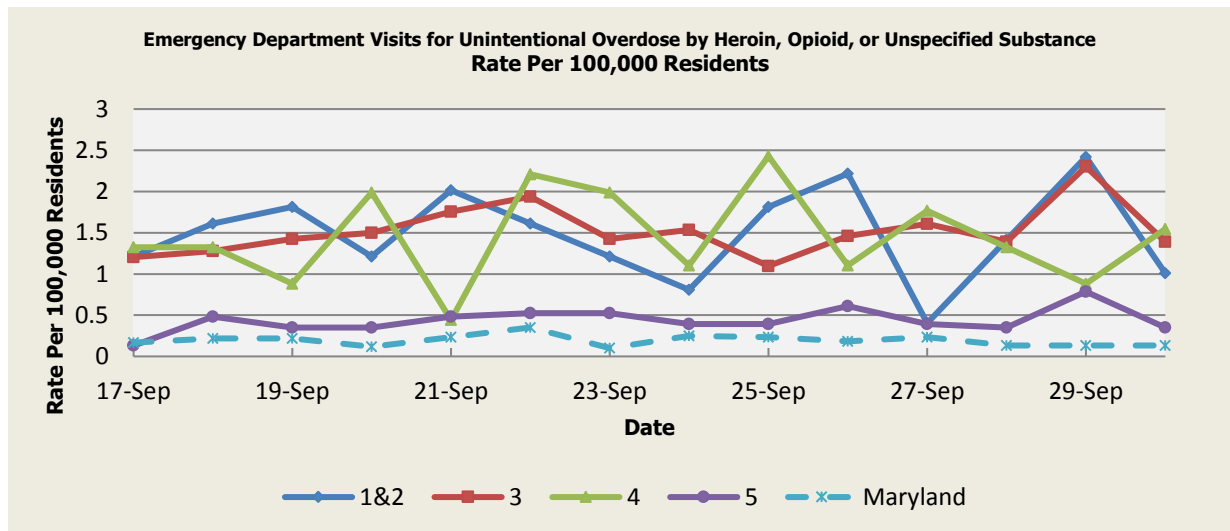
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.19	3.06	2.37	4.10	3.42
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

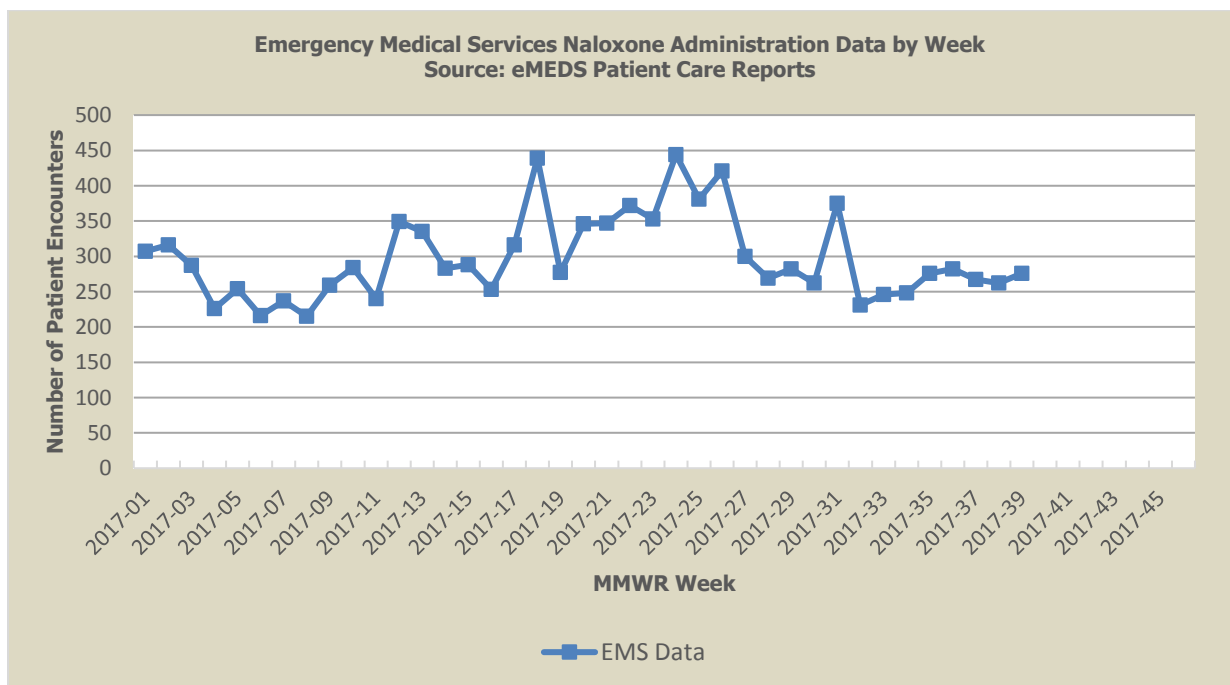
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



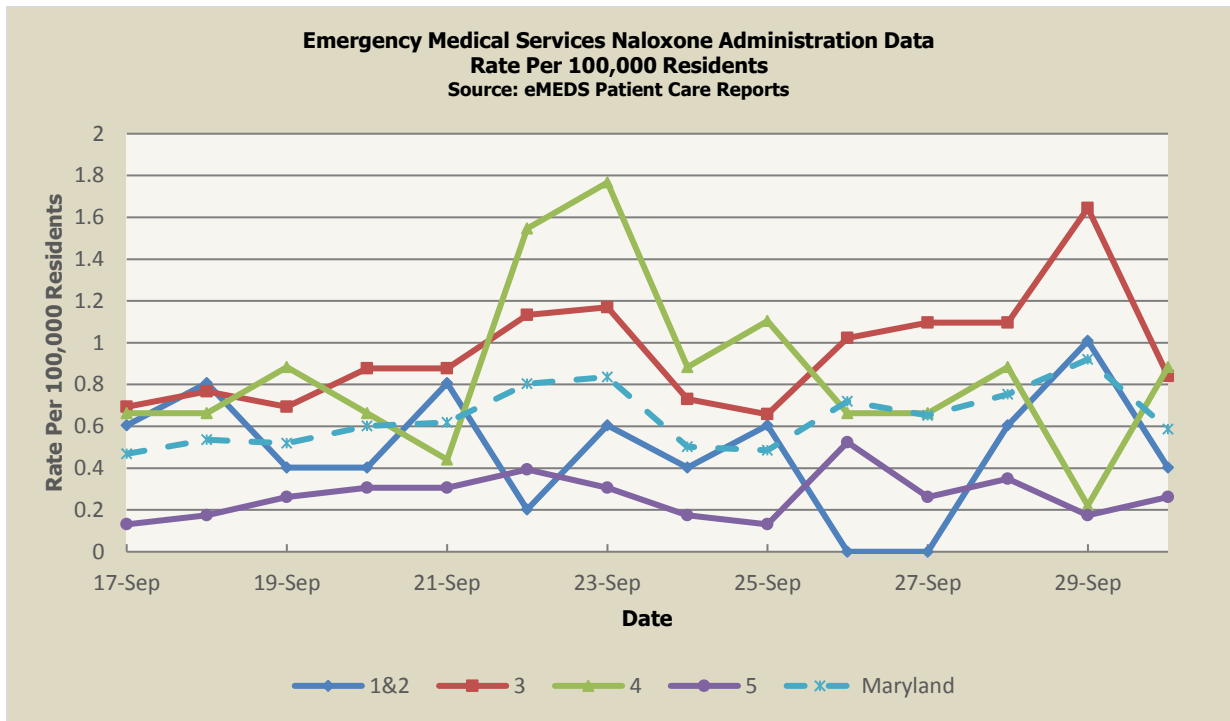
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient’s signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 25, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

HPAI H5N8 (SOUTH AFRICA), 3 Oct 2017, At least 62 cases of the deadly H5N8 influenza strain which include an outbreak among poultry and non-poultry animals have been reported throughout the country. Staff are pulling together after an outbreak of avian influenza at Africa's largest bird park situated in Cape Town. Read More: <http://www.promedmail.org/post/5357892>

HUMAN AVIAN INFLUENZA:

There were no reports of cases of avian influenza in the United States or internationally at the time that this report as compiled.

NATIONAL DISEASE REPORTS:

H3N2v INFLUENZA, SWINE (DELAWARE), 30 Sept 2017, The Delaware Division of Public Health (DPH) announced the state's 1st laboratory-confirmed case of a variant influenza virus in a female Sussex County resident under age 18, who had close contact with pigs at a county fair in Maryland. The case is mild and the individual is recovering. No additional information will be released on the individual to protect her privacy. Read More: <http://www.promedmail.org/post/5350726>

BOTULISM (ALASKA), 30 Sept 2017, Epidemiologist Louisa Castrodale with the Department of Health and Human Service says this year [2017] there have been 3 cases of botulism in Alaska. The average hovers anywhere between zero cases, to 10, according to DHHS. Read More: <http://www.promedmail.org/post/5349662>

WEST NILE VIRUS (CALIFORNIA), 30 Sept 2017, Of 98 reported infections here this year [2017], 79 have led to serious neurological side effects, and 87 have required hospitalization. Because it's still peak mosquito season, more deaths are expected. Read More: <http://www.promedmail.org/post/5351220>

HEPATITIS A (NEW YORK), 1 Oct 2017, Albany County recently has seen an increase in hepatitis A cases among men who have sex with other men, according to a county Department of Health public alert. The county has seen 11 cases of hepatitis A since early summer, according to Albany County DOH Commissioner Dr. Elizabeth Whalen. For comparison, there were 4 cases reported in 2016 and 2 in 2015. Read More: <http://www.promedmail.org/post/5350449>

H3N2v INFLUENZA, SWINE (MARYLAND), 1 Oct 2017, In a follow-up on the situation in Maryland with the influenza virus strain H3N2v (variant flu) linked to exposure to swine, the Maryland Department of Health now puts the case tally at 37 presumptive positive and confirmed cases (including 2 hospitalizations). Read More: <http://www.promedmail.org/post/5354082>

VIBRIO VULNIFICUS (ALABAMA), 3 Oct 2017, A 7th case of *Vibrio* infection has been confirmed in Mobile County. The 1st case dealt with an individual who consumed raw oysters while in another state during March 2017. The majority of *Vibrio* cases reported each year come from eating raw shellfish. The 2nd incident took place in April 2017, and involved the consumption of raw oysters while in Mobile County. Read More: <http://www.promedmail.org/post/5357539>

VIBRIO PARAHAEMOLYTICUS (MASSACHUSETTS), 3 Oct 2017, Katama Bay will be closed to oyster harvesting for 14 days because of 3 confirmed cases of *Vibrio parahaemolyticus* linked to the consumption of raw oysters collected from the area earlier in September 2017, according to the state Department of Public Health. Read More: <http://www.promedmail.org/post/5357399>

HEPATITIS A (CALIFORNIA), 4 Oct 2017, Add 20 more cases and 22 more hospitalizations to San Diego County's ever-growing hepatitis A outbreak. Read More: <http://www.promedmail.org/post/5355999>

INTERNATIONAL DISEASE REPORTS:

DENGUE (SRI LANKA), 30 Sept 2017, The number of dengue cases reported so far this year [2017] in Sri Lanka exceeds 147 700, with more than 300 deaths, although the spread of the epidemic has receded in recent weeks. Read More: <http://www.promedmail.org/post/5351535>

PLAGUE (MADAGASCAR), 1 Oct 2017, WHO is rapidly scaling up its response to an outbreak of plague in Madagascar that has spread to the capital and port towns, infecting more than 100 people in just a few weeks. Read More: <http://www.promedmail.org/post/5353252>

CHIKUNGUNYA (PAKISTAN), 1 Oct 2017, At least 241 suspected cases have been reported throughout Sindh province from 1 Sep 2017 to date; out of these 241 cases, 154 emerged from Karachi alone. Sindh Health Department released a report which stated that a total of 4329 chikungunya suspected cases surfaced in the province, out of which 3462 were from Karachi, while the rest of the cases surfaced in Tharparkar/Mithi, Sanghar and Umerkot. Read More: <http://www.promedmail.org/post/5352966>

SALMONELLOSIS (JAPAN), 1 Oct 2017, A total of 87 kindergartners, aged 3 to 6, reported symptoms like fever and vomiting after consuming the tainted bento meals between 21 and 28 Sep 2017, according to officials of Okazaki, reports TBS News on 29 Sep 2017. *Salmonella* was detected in many of the affected children, 10 of whom were hospitalized, but none are in life-threatening condition, authorities said. Read More: <http://www.promedmail.org/post/5353481>

HEPATITIS A (MEXICO), 1 Oct 2017, The Health Services of Oaxaca (SSO) reported that according to the Unified Information System of Epidemiological Surveillance (SUIVE), 8 cases of hepatitis A were reported in San Mateo del Mar. It is a region affected by the earthquakes of 7, 19 and 23 Sep 2017. Read More: <http://www.promedmail.org/post/5353850>

MERS-CoV (SAUDI ARABIA), 1 Oct 2017, 1721 laboratory-confirmed cases of MERS-CoV infection, including 696 deaths, 1008 recoveries, and 17 currently active cases/infections. Read More: <http://www.promedmail.org/post/5353977>

ANTHRAX (KYRGYZSTAN), 2 Oct 2017, Doctors say that the locals butchered the carcass of an animal, and 10 days later the 1st symptoms of this dangerous infection appeared on the skin of the wrist areas and forearms. Read More: <http://www.promedmail.org/post/5355346>

TULAREMIA (ARMENIA), 2 Oct 2017, An outbreak of the zoonotic bacterial infection, tularemia, has been reported in Armenia according to a Haqqin.az report (computer translated). According to the report, at least 20 people in the village of Artsvaberd in Tavush province were affected by the outbreak. The report does not state how the villagers were infected. Read More: <http://www.promedmail.org/post/5355480>

PLAGUE (MADAGASCAR), 2 Oct 2017, The outbreak of plague in Madagascar, which started in August 2017, is ongoing. There are currently 133 cases and 24 deaths. Read More: <http://www.promedmail.org/post/5355599>

CHIKUNGUNYA (ITALY), 2 Oct 2017, Italy has reported nearly 200 chikungunya cases in the Lazio region, and this has prompted the Centers for Disease Control and Prevention (CDC) to issue a travel notice Watch Level 1 for the area. Read More: <http://www.promedmail.org/post/5355998>

AFRICAN SWINE FEVER (UKRAINE), 3 Oct 2017, In the farm Kolos two pigs died. Samples were taken from the dead pigs and African swine fever virus was detected by PCR method. In the farm, 4,194 pigs were kept. A complete stamping out and all related measures are ongoing. Read More: <http://www.promedmail.org/post/5357589>

SALMONELLOSIS (NORWAY), 3 Oct 2017, Norway, where *Salmonella* bacteria is rare in domestic livestock and locally-produced food, is experiencing its first outbreak of salmonellosis since 2013. The Norwegian Institute of Public Health (NIPH) has not been able to identify the source of the *Salmonella* that has recently infected at least 7 people. All 7 report eating at the Joe & The Juice restaurant at the Oslo Airport recently while traveling. Read More: <http://www.promedmail.org/post/5357889>

SALMONELLOSIS (CANADA), 3 Oct 2017, The *Salmonella Enteritidis* outbreak strains associated with the 2 investigations are not related by whole genome sequencing (WGS). In Canada, all cases of *Salmonella* are characterized by WGS in real time. There was a recall associated with the earlier outbreak investigation with cases between April and June. Read More: <http://www.promedmail.org/post/5357726>

HANTAVIRUS (CHILE), 4 Oct 2017, The number of people infected by a hantavirus in the Araucanía region climbed to 14, after the report of a case in a 41-year-old man from Villarrica who presented with symptoms; after he was examined it was confirmed he had the virus. He is hospitalized in the intensive care unit of the Hernan Henriquez Aravena Hospital in Temuco. Read More: <http://www.promedmail.org/post/5358863>

CLASSIC SWINE FEVER (RUSSIA), 4 Oct 2017, The source of the outbreak is inconclusive. The measures applied were movement control inside the county, surveillance within containment and/or protective zone, screening; quarantine, and official disposal of carcasses. Read More: <http://www.promedmail.org/post/5361340>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

